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ABSTRACT

A project designed to improve rural vocational education in California accomplished a comprehensive needs assessment conducted with representatives of rural community college vocational programs, combining input from secondary programs and special interest groups concerned with women and minorities, and developed strategies for strengthening rural vocational programs for each area of need. Following a literature search and review and identification of the target group, staff from eighteen rural community colleges and California State University held eleven meetings to identify needs specific to rural vocational education. Additional meetings with special interest groups, legislators, educators, and state officials were held. Data from the meetings and a pilot-tested needs assessment were compiled and used as a basis for a convocation attended by rural vocational deans. At this meeting final strategies were formulated in response to the data. In all, twenty-nine needs areas were identified, ranked by priority, and aggregated into twelve major issues. These included vocational education finance, excessive cost programs, staff overextension, increasing educational alternatives, anti-rural bias, grantsmanship, guidance and counseling, upgrading professional skills, involvement in the decision-making process, and serving new types of students. Change strategies were developed for each area. (Annotated references and survey results are appended.) (MN)

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STRATEGIES FOR STRENGTHENING RURAL VOCATIONAL PROGRAMS

Agency: Planning Associates

Project Director: John Twomey

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June 30, 1980

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I. EXECUTIVE SUMMARY

In October, 1979, following the passage of Proposition 13, two hundred ACSA Small School Administrators held their annual fall conference in Sacramento. Many workshop sessions and most shop-talk conversations revolved around the effects of budget cuts on small school districts and the problems this represented.

Most, although not all, small school districts are scattered throughout the state's rural areas. In a district as large as Los Angeles City Unified, a 10 percent budget reduction may pose definite problems, but in rural areas it can mean real crises. The difference is one of economy of scale: there are levels beyond which budgets may not be cut if programs are to survive in schools of 150, 400, or even 700 students.

Vocational Education programs are as vulnerable to measures of economy as other programs, and perhaps more so, since Vocational Education is generally costlier to operate. Compounding the problem for rural vocational educators are demographic and sociological circumstances unique to their areas--i.e., limited employment models and employment opportunities. This means that certain vocational programs in given rural areas are beyond the experience of students and that many kinds of work experiences are unavailable. Further compounding the problem is the fact that "new and emerging" employment opportunities usually present themselves first in urban areas and only come much later to rural sectors of the state, if they come at all. As a result, students in rural vocational education programs are at a distinct disadvantage.

Against this background of wide diversity statewide and differing needs, 34 Commissioners from the Commission on Vocational Education have been working to examine the role of Vocational Education. They issued a Draft Report on December 11, 1978, which concluded that what is needed is for the educational system to "be clearly defined." Salient points included the following:

> That definition should include the system's mission and goals as well as the purpose and function of each of its parts.
>
> Each of of the following needs to be clearly stated:
>
> - The mission of the entire system is to prepare people for life and work, including career awareness, exploration, preparation, application, and transition.

- Specific roles and responsibilities and how they complement the mission of the entire system.

- The needs of students, industry, labor, and society.

How this mission, these roles, and these needs will be met in rural areas should be expected to differ substantially from responses in urban areas. In fact, if rural Vocational Education programs are to survive and fulfill the mandate to prepare every student for employment, rural educators must respond to their own problems in a concerted fashion, suggest and test their own remedies--for it is they who know better than anyone else their weaknesses and potential--and implement their own strategies.

Project 8533, entitled "Strategies for Strengthening Rural Vocational Education," responded to this situation and accomplished two things: 1) a comprehensive needs assessment was conducted with representatives of rural community college vocational programs, combining input from secondary programs and special interest groups concerned with women and minorities, and 2) strategies for strengthening rural vocational programs were developed for each area of need. In all, 29 areas were identified and ranked by priority. These were then aggregated into twelve major issues and are summarized below.

ISSUE:	STRATEGY FOR STRENGTHENING RURAL VOCATIONAL EDUCATION
1. Vocational Education Finance	Restructure funding formula to include a depreciation factor and either include a scarcity factor or allocate resources on a per student basis.
2. Excessive Cost Programs	Strengthen satellite programs and transportation systems.
3. Staff Overextension	Consolidate data reporting through a centralized computer network connected directly to the Chancellor's Office.
4. Categorical Emphasis	Follow federal guidelines more closely.
5. Rural Employment Training Needs	Subsidize small training classes or combine compatible small programs and base training on current labor market data.

ISSUE:	STRATEGY FOR STRENGTHENING RURAL VOCATIONAL EDUCATION
6. Involvement in the Decision-Making Process	Appoint an administrator at the Vice-Chancellor level to provide a focal point for vocational education program planning, implementation, and contact with the Legislature.
7. Increasing Educational Alternatives	Offer competency-based, open-entry/open-exit training programs and related strategies.
8. Upgrading Professional Skills	Require regular continuing education for instructors both in their instructional area and in working with new and/or emerging student populations to maintain Vocational Education certification.
9. Vocational Education Guidance and Counseling	Give vocational educators release time for counseling in the area they know best.
10. Anti-Rural Bias	Appoint an administrator with responsibility for Vocational Education at the Vice-Chancellor level who understands and can relate to the rural schools.
11. Grantsmanship and Additional Funding	Utilize technical assistance provided by the Chancellor's Office and approach discretionary funding as consortia of similar interests.
12. Serving New Types of Students	Consolidate inadequately funded programs for special target groups in order to make complete programs available and increase the incentives and rewards for instructors who are more responsive to and more effective with special target groups.

The following pages describe the evolution of this study and each of these twelve major issues in detail. For those who require more empirical evidence to justify or refine strategies, this study will provide the necessary point of departure for future work.

Finally, responsibility for appropriate responses to these issues is divided between the Chancellor's Office and the local colleges themselves. Changes to the basic funding formula, for example, involves effective leadership from the Chancellor's Office. Other strategies hinge on the realization at the State level that the Chancellor's Office exists to serve the field and not visa versa.

Likewise, other issues involve local administrative options only. They are areas which the Chancellor's Office cannot and should not resolve. With these issues, the natural tendency to blame the Chancellor's Office must be overcome so that local administrators can attend to decisions which are theirs alone. For example, those institutions which do not allocate sufficient general fund resources to vocational programs, expecting funds to suffice, must re-examine their educational priorities and the needs of their service areas if their vocational programs are to be truly effective.

II. RESTATEMENT OF PROJECT ACTIVITIES AND ANTICIPATED OUTCOMES FROM THE ORIGINAL PROPOSAL

A. Statement of Objectives

The following objectives were taken directly from the RFP issued in the fall of 1978, and were originally scheduled for accomplishment between April 1, 1979, and June 30, 1980.

1. By June 30, 1979, identify the unique factors which affect the quality of rural vocational education programs through documentation searches and extensive contact with rural vocational educators.

2. By June 30, 1979, with further input from rural vocational educators, identify strategies for improving, on a statewide basis, the quality of rural vocational education programs.

3. By September 30, 1979, initiate demonstration activities of program improvement strategies at a representative sample of rural Community Colleges and secondary school vocational education programs.

4. Between September 1, 1979, and April 1, 1980, assess progress of the improvement activities and determine necessary continued activities beyond the current project.

5. By May 30, 1980, design, review, and modify as needed a system for determining the impact the project will have on improving instruction in the classroom within a five-year period, to include indirect improvement through improved management resulting in cost and time effectiveness at the program level, as well as innovative instructional strategies and methodologies.

6. Between March 1 and May 30, 1980, complete inservice activities for communicating program improvement strategies among rural vocational education organizations and concerned interest groups.

7. By June 30, 1980, prepare for dissemination a final report of project outcomes and recommendations.

B. Equal Opportunity and the Objectives

Implicit in each of the objectives were considerations involving sex equity and improvement of programs and services for disadvantaged, handicapped, and limited-English-speaking (LES) students. Along with contacting professional vocational education groups and conducting the literature search, project staff was to also contact groups with special interests in the vocational education of women, disadvantaged, handicapped, and LES. Their input was to be used as part of the working data over the twelve months of project activities.

III. ACTIVITIES CONDUCTED DURING THE PROJECT

The project's first activity involved refining the project concept in light of the shortened timeline. Done in cooperation with the California Community College Chancellor's Office Consultant assigned to monitor the project, it was determined that the project would emphasize community college vocational programs, rather than those offered by secondary schools. Community colleges not only offer the majority of vocational education training, but the two educational levels operate from very different points of view. The secondary school trains students in vocational education skills as an ancillary part of a general education requirement. For the community college, the task of vocational education assumes a much larger role in overall educational responsibility. Students often enroll in community colleges only for vocational skills training (2)[1]. It was decided, therefore, that the project would focus primarily on the community college system, but that secondary-school input could be obtained by including the colleges' feeder schools in parts of the study.

It was next determined that in view of limited project resources, maximal results would be obtained by working with the two largest consortia of rural vocational educators in the state: the San Joaquin Valley Community College Council for Occupational Education (SJVCCCOE) and the Northeastern California Higher Education Council. This approach was designed to further both the needs of the community college system, as well as that of the project. With limited staff time and limited budget for travel, the California Community College Chancellor's Office encourages community colleges to work in more efficient and cost-effective consortia. Coordinating the project through two such groups helped the Chancellor's Office emphasize the utility of such organizations.

Project staff next met with representatives of legislative offices and the Auditor General to gain further information regarding issues affecting rural vocational education. For example, legislative staffs have been involved since the passage of Proposition 13 in the redistribution of vocational education funds. They were particularly interested in providing input to and receiving information from the project in the area of finance. The Auditor General's Office had recently completed work on both responsiveness of public school vocational education to labor market conditions and the distribution of federal Vocational Education

[1] Numbers in parentheses refer to citations in Appendix A, Annotated Selected References.

funds in California. These are cited in Appendix A, Annotated Selected References (3, 4, and 5). Both representatives of legislative offices, especially the Rural Caucus, and the Auditor General's Office were rich sources of background information for the project.

Simultaneously, project staff searched VERIC files, both through the State Department of Education and Merced Community College, for relevant information. Resources were located, obtained, and integrated into the study, especially in the formulation of items for the survey. The most important results of the VERIC searches are contained in Appendix A, Annotated Selected References, with cross-references by citation number throughout this report.

As the intent of this project was to identify ways to strengthen rural vocational education programs, a further issue requiring early resolution by project staff involved the definition of "rural." The dictionary definition of rural is "1. of or characteristic of the country (as distinguished from cities or towns), country life, or country people; rustic: opposed to urban; 2. living in the country; 3. having to do with farming; agricultural." Citation (11) in Appendix A suggests that "rural" is any community with fewer than 2500 people. This definition, however, proved unsatisfactory. In the state of California, many communities refer to themselves as rural and exceed this stringent limit.

The definition of rural school as small school was not helpful either. The Association of California School Administrators (ACSA) uses a definition derived informally several years ago which designates small schools as those under 900 ADA. Another definition considers schools under 1200 ADA or FTE as small or rural. In the case of community colleges, however, this limit is regularly exceeded. In addition, small schools exist in metropolitan areas as well. Thus, neither definition serves satisfactorily.

The Rand Study (6(a)) noted that only 9 percent of California should be considered rural, yet many communities outside the greater Los Angeles, San Jose, San Francisco, Sacramento, and Fresno areas consider themselves such. The difficulty comes in sorting out the difference between "rural" and "non-metropolitan." The working definition of rural, for purposes of this project was finally determined through self-identification. Those community colleges which consider themselves rural became the target population. These are organized into the two major consortia of vocational educators in the State, the San Joaquin Valley Community College Council for Occupational Education (SJVCCCOE) and the Northeastern California Higher Education Council.

There is precedence for defining rural on the basis of self-selection. Citation (10) in Appendix A describes the recent study by Dr. Robert A. Ross, who found that objective characteristics of rural schools in the Virginia Community College system correlated highly with self-perceptions of ruralness.

The list of those community colleges which took part in the project included the following:

Bakersfield College
Bakersfield

Cerro Coso Community College
Ridgecrest

College of the Sequoias
Visalia

Columbia Junior College
Columbia

Fresno City College
Fresno

Merced College
Merced

Modesto Junior College
Modesto

Porterville College
Porterville

Reedley College
Reedley

Taft College
Taft

West Hills College
Coalinga

Delta College
Stockton

Butte College
Oroville

Feather River College
Quincy

Lassen College
Susanville

Shasta College
Redding

College of the Siskiyous
Weed

Yuba College
Marysville

California State University, Chico, as the Northeastern California Higher Education Council's headquarters, also participated in the study.

Following the literature search and review and identification of the target group, project staff held eleven meetings between September 1979 and June 1980 to identify the needs specific to rural vocational education programs and the strategies for strengthening them. These did not include additional meetings with individual representatives of vocational education programs from the various colleges, ROP programs, adult education, vocational education programs, special interest groups, legislators or legislative staff,

the Employment Development Department, the Department of Labor, or field staff from the Chancellor's Office and State Department of Education. The eleven meetings included a pre-conference planning session in Fresno in January and the convocation in May.

Project staff met with representatives of the target group for the first time in September to explain the project. The second meeting was held to review a tentative list of rural vocational education needs suggested by the literature, by interviews with legislative staff and representatives of the Auditor General's Office, and by initial conversations with the SJVCCCOE and the Northeastern California Higher Education Council. These administrators of rural vocational programs took this initial list to review with both their vocational education instructors and their feeder high schools. On the basis of this input, a pilot needs survey was developed for distribution at the November meeting.

Following the November meeting, the administrators disseminated the draft version of the needs survey at vocational education meetings. Feeder high schools were represented at these meetings, and as a result, the interests and concerns of secondary vocational educators are included in the results. In addition, selected ROP directors had been interviewed in the initial development of the questionnaire, and the concerns of secondary vocational educators were continuously addressed by the community college administrators who know the concerns of their feeder schools well.

The draft needs assessment was pilot tested in November and the results reviewed at the project's December meeting. At that meeting, it was determined that the results of the first questionnaire were unsatisfactory: the directions specified that the respondent was to select only the ten most critical items and number them in rank order from 1 to 10. The administrators requested that each item receive a ranking by those completing the survey. In this way, it would be possible to ascertain the relative importance of each and every item on the survey.

The survey was then disseminated a second time for pilot testing to a select group and reviewed at the special January meeting to insure that the data would be in a form most suitable for project purposes. Preliminary responses were used to develop an agenda for a meeting between the new Community College Chancellor and representatives of the rural community colleges. During the remainder of January, the survey was mailed to the general target group for response.

February, March, and April were spent contacting those administrators who had not yet returned the survey, by updating representative administrators of the rural community colleges on the results of the survey to date, and by engaging in preliminary discussion of strategies related to initially identified needs.

On the basis of early responses to the needs assessment, it became apparent that the original proposal plan was no longer tenable. The needs of rural community college vocational education programs revolve primarily around finance and management. Curriculum is a crucial consideration, but will not be satisfactorily addressed until the other two are resolved. Therefore, it was not reasonable or productive to spend time piloting alternative curricula or classroom strategies when rural vocational education programs' essential needs involve funding, the allocation of personnel, and proper management. The project monitor and others from the Chancellor's Office were a part of these discussions as initial results became available. It was decided that the most productive use of project resources was in the formulation of strategies to deal with the very real problems faced by rural community colleges and that the specifications in the RFP, written approximately two years before the passage of Proposition 13, were to be addressed as far as possible in light of current reality.

Data from the survey and the meetings were compiled in May and invitations sent to rural vocational Deans to attend a convocation prior to the California Community College Administrators of Occupational Education Spring 1980 Conference held in Sacramento. It was at this meeting that complete results from the survey were discussed and final strategies were formulated in response to the data.

The final meeting with members of the target group occurred in June when project staff met with the SJVCCCOE President to give a status report on the project and schedule a meeting in September when the project director would present a briefing on the project to a group of rural vocational educators and disseminate copies of the report. The September meeting will be a follow-up activity to project efforts.

IV. PROJECT RESULTS

The results of Project 8533 are based on the results of the needs assessment conducted between January and April of 1980 and the strategies which administrators of rural vocational education programs and concerned interest groups have determined would best respond to these needs. The results of the surveys are contained in Appendix B of this report. There is first the combination of results for both the Northeastern California Higher Education Council and the San Joaquin Valley Community College Council for Occupational Education, followed by the results for each consortium displayed separately. Each item from the needs assessment is listed in the order of relative importance assigned by respondents. I.e., vocational education finance or governance was given first priority, excessive cost programs second priority, etc.

For reporting purposes, the twenty-nine separate needs assessment items have been aggregated into twelve major issues affecting rural vocational education. The approach taken in this section involves discussion of each issue separately and presentation of the strategy or strategies which would strengthen rural vocational education in the each area under consideration. Some issues and their corresponding strategies need resolution at the State level. Others are matters of local management and must be addressed locally. Each is important to the delivery of effective vocational training.

NUMBER ONE: VOCATIONAL EDUCATION FINANCE

Discussion of the Issue:

On March 19, 1979, the Legislative Audit Committee released the report prepared by the Auditor General's Office which found inequities in the allocation of vocational education funds. Specifically, large urban districts were receiving a disproportionate share of the resources. With pressure from the Rural Caucus, the Legislature revised the formula and increased funding to rural programs, but not sufficiently to resolve the matter. The perception still exists among administrators of vocational education programs that the funding formula is not yet equitable. For example, the current funding formula is partly based on the number of welfare recipients in a given area. There is no evidence that this statistic is necessarily reflected in vocational training.

Pre-Proposition 13 funding formulae were based on ADA. The new funding mechanism is similar to a block grant with an established ceiling. The new formula and its adjustment do not take into account either the economy of scale of operating vocational programs in rural areas or capital outlay items.

The cost of vocational education in rural areas is not necessarily comparable to that in urban areas. A substantial amount of research indicates that the cost is, in fact, higher (5(a), 6(d), 7, 8, 9, 10, 11). The Legislature's response to the Auditor General's Report through demands by the Rural Caucus is a temporary measure which does not address fundamental questions of equitable allocations. The matter is complicated by the fact that a dependable data base does not exist. The Auditor General's Office, for example, was unable to proceed with an analysis of vocational education reporting or project management for lack of suitable data (5). Welfare counts, for example, should be important factors in equalizing vocational education funding, yet it is impossible to tell how many welfare recipients are enrolled in vocational education programs.

Legislative representatives stated that there was no possibility of addressing the matter again in this last year: one adjustment per session was all that could be expected. With the new session pending, it will be time to reconsider the matter of vocational education funding.

Strategy for Strengthening Rural Vocational Education:

The results of this project indicate that it would be appropriate to include a scarcity factor in the funding formula for vocational education. The scarcity factor would be predicated on the concept of economy of scale and is analogous to the CAL-TRANS' subsidy of public transportation systems in non-metropolitan areas of the state. There is clearly a lower limit beyond which program funding cannot go if equitable vocational training is to be provided. If adjustments for economy of scale are not politically feasible, then at least a formula based on per pupil count would be more equitable.

A possible consideration in the development of such a formula is reorganization of program offerings in rural areas. Perhaps those programs which are small and expensive should be centralized and offered only at specific locations, with provisions made for accessibility.

The second strategy which would strengthen rural vocational education (in fact, this is a concern statewide) would involve a depreciation factor in the funding formula. Administrators of vocational educational programs, rural and otherwise, are hard pressed for capital outlay dollars. Vocational education budgets make ample provision for services, but like other public allocations, they do not provide adequately for capital outlay for replacement of worn-out equipment or purchase of new instructional hardware. The problem is compounded by the fact that district budgets are not being spent on capital outlay because the full effect of Proposition 13 has yet to be determined. Districts are safeguarding their resources for possible shortages later.

The target group with which project staff worked over the course of the 1979-80 academic year urges the Chancellor's Office to work closely with the Rural Caucus to revise the funding formula in the coming Legislative session. It will inevitably fall to the Chancellor's Office to provide Legislators with the necessary data upon which informed and equitable decisions can be made. The target group is prepared to assist the Chancellor's Office in this effort.

NUMBER TWO: EXCESSIVE COST PROGRAMS

Discussion of the Issue:

Excessive cost programs and excess cost programs are not synonymous. Each is related to the previous issue, but are important enough to warrant separate consideration.

VEA funding can be spent in any of three ways: maintaining present programs; expanding programs; or improving programs. Expansion of programs refers to either offering additional classes of a current program or actually starting new programs. The difference between the ADA generated by vocational classes and the costs of operating those classes is called "excess cost." VEA funding is use to subsidize this excess cost, but the level of funding is never sufficient to compensate. Therefore, it falls to local districts to decide what amount of general-fund dollars will be allocated to vocational programs, and herein lies the problem: the vocational education budget becomes a direct reflection of institutional commitment to vocational education programs.

Excessive cost programs, on the other hand, are vocational programs in general. It is a well-known fact that vocational programs cost two and three times more than other programs due to the technology which is needed for such offerings. Program costs alone pose real difficulties for administrators of rural vocational programs.

Strategy for Strengthening Rural Vocational Education:

Two strategies would strengthen rural vocational education in this area. First, new excessive-cost vocational programs should result only as a response to local employers' needs. This would increase the possibility of local industry's contributing to the capital-outlay expenitures for such programs. For example, a large printing concern has recently relocated in the Central San Joaquin Valley with the promise of 1,400 new jobs. The local community collge could train people for these positions, and the company could in turn supply the sophisticated technology needed for appropriate programs.

Second, in light of the fact that two-thirds of the students in California community colleges enroll for vocational training (2), it is necessary for rural community colleges to rethink their educational priorities. Furthermore, given the fact that only approximately ten percent of community college students matriculate to four-year colleges and universities, vocational education would seem an appropriate emphasis for the California community college.

NUMBER THREE: STAFF OVER-EXTENSION

Discussion of the Issue:

There has been considerable attention given recently to the amount of staff time consumed in paperwork for special programs. The State Department of Education, for example, just completed a Special Education study which investigated the "Paperwork Bottleneck." Paperwork is an issue of considerable concern, as it involves matters of productivity and efficiency. If this matter is receiving attention from large districts and public agencies, the reader can well appreciate its impact on rural community college vocational programs.

Those concerned with the administration of vocational education programs complain that paperwork requirements consume exorbitant amounts of staff time, and it has increased the need for staff people who have no direct relationship to classroom instruction and vocational

training. Furthermore, administrators of vocational programs receive a number of requests annually from various agencies for basically the same information. Finally, have found it difficult to develop an on-going, computerized data base because the data requirements from the Chancellor's Office change annually. The paperwork issue and its effects are well documented throughout the literature (5, 10).

Rural administrators of vocational education acknowledge the necessity of documenting program implementation. The tax-paying public must be able to determine whether resources are utilized properly and effectively. However, some better method of accountability is certainly needed.

Strategy for Strengthening Rural Vocational Education:

There have been recent attempts at the State level to consolidate information, and administrators of rural vocational education programs commend the Chancellor's Office for taking such steps. What is needed, however, is a more fundamental strategy: a more systematic management information process whereby changes to the data base would be agreed upon by the field (i.e., by those upon whom the paperwork burden rests), with sufficient advance time to insure the validity and reliability of information.

The recommended strategy also involves consolidation of all information into one source through a standardized, centralized information management system with terminals installed at every community college district office, communicating directly with the Chancellor's Office in Sacramento. It could contain all the information needed concerning every program and every school and could be accessed readily by those responsible for producing the various reports required by both federal and state governments.

NUMBER FOUR: CATEGORICAL EMPHASIS

Discussion of the Issue:

While VEA funds constitute a relatively small portion of vocational education funding, there is increasing emphasis on structuring programs in response to the needs of special target groups. Rural administrators of vocational education programs perceive that the Chancellor's Office has gone further than federal regulations require and that the tail is now wagging the dog, so to speak. The net effect has been increasing paperwork requirements and a narrowing of the flexibility of districts to satisfy local needs.

Strategy for Strengthening Rural Vocational Education:

The strategy which would strengthen rural vocational education is for the State Chancellor's Office to follow federal guidelines closely and avoid imposing further layers of restrictive regulations which limit local flexibility.

NUMBER FIVE: RURAL EMPLOYMENT TRAINING NEEDS

Discussion of the Issue:

Responding to business and labor's employment needs in rural areas requires a different approach from that used in urban areas. There is a need for a wide range of skills in rural areas, for example, contrary to the trend in industry toward more specialization. Yet the Vocational Education Act specifies employment in the occupation for which a student is being trained (6(d), 13).

A related problem involves class-size. On the one hand, the rural employer who has need of hundreds or even dozens of employees at a given time is rare. On the other hand, vocational education training programs require a number of ten students before a class can be offered economically in a district. The issue is how to provide training for small numbers of students and satisfy local employment needs.

Strategy for Strengthening Rural Vocational Education:

The strategy for responding to employment needs in rural areas is to subsidize small classes (i.e., application of the economy of scale concept) or offer classes for larger groups of students where two or more related specialities are taught concurrently. CETA and CWETA are instructive with regard to the first alternative. They require no minimal class sizes and have met with great success as training programs. Regular vocational education could take lessons from these programs.

With regard to the second alternative, evidence suggests that the rural employee must have a greater repertoire of skills than the urban employee. In small businesses and industries, the rural employee is often expected to wear more hats than his/her urban compatriot, and therefore, instruction in a combination of judiciously selected areas is both logical and potentially quite productive.

Planning for rural employment training programs must further respond to a well-defined information base. Labor market analysis of new and emerging manpower needs in rural areas is essential. Although rural programs have advisory committees to assist them, administrators feel that more work could be done to identify potential job opportunities earlier and to determine what specific educational needs must be met to prepare people for work in new and emerging industries. Curriculum development and upgrading instructional skills are important considerations for proper program planning.

NUMBER SIX: INVOLVEMENT IN THE DECISION-MAKING PROCESS

Discussion of the Issue:

The decisions which have greatest impact on rural community colleges are being made by the California State Legislature. Administrators of rural vocational programs feel that they have no access to this process except directly through their local legislators and the Rural Caucus. They further perceive that when their input is sought by the Chancellor's Office that it is of no consequence. There is no longer any staff member at the Vice-Chancellor's level with direct responsibility for all vocational education programs. As a result, administrators of rural vocational programs feel that their concerns have no place for expression within the Chancellor's Office.

Strategy for Strengthening Rural Vocational Education:

Rural vocational education administrators want an administrator at the Vice-Chancellor's level who will be a focal point for vocational education, program planning, and implementation. In fact, this strategy is widely desired by administrators of vocational education programs throughout the State. If this is not done, administrators see no choice but to continue circumventing established lines of authority to satisfy their needs. Their preference, however, is to work in unison, with leadership from the Chancellor's Office, for the good of the entire community college system.

NUMBER SEVEN: INCREASING EDUCATIONAL ALTERNATIVES

Discussion of the Issue:

Current rural vocational education programs are limited by both class-size limits and the semester/quarter system. Only schools with CETA or CWETA training

programs demonstrate flexibility. These programs often utilize an open-entry/open-exit approach and typically combine classroom instruction with on-the-job training. This combination has been found to be the most effective approach to developing vocational skills.

Where colleges are offering CETA or CWETA programs, there is also considerable duplication of regular programs. CETA/CWETA customarily involves a basic skills component. One would assume that the regular program would provide this component, but most regular programs are inflexibly tied to the semester/quarter system and unable to accommodate short-term or open-entry/open-exit training. Where regular programs are competency based, they are usually either individualized nor organized in modules to allow for differing student schedules.

A further facet of this same issue involves the multiplicity of training programs which have sprung up as a result of Department of Labor Training programs. Rural administrators of vocational education acknowledge the need for program variety, but they also perceive that better training would result if programs were coordinated, supplying resources where gaps existed (6(b), 6(c), 7).

Strategy for Strengthening Rural Vocational Education:

There are a number of strategies which would strengthen rural vocational education in the area of educational alternatives. The majority of these are local issues dependent upon the values and priorities of local college administrators. They include:

(a) Eliminate duplication of regular programs through a competency-based, open-entry/open-exit approach with instruction provided on an individualized basis. Give students credit for relevant knowledge and performance skills where they can demonstrate competency, and bury the notion that seat time or a semester/quarter of instruction necessarily equates to salable skills.

(b) Continue to facilitate interdistrict transfers so that students desiring specialty training have easier access to appropriate instruction. Regional planning for the consolidation of small, difficult-to-run programs should also be considered.

(c) Offer small classes in areas directly related to local employment demands. (See issue number five for full discussion of this strategy.)

(d) Allocate more staff time to develop and maintain work experience sites directly related to students' training objectives. ROP/C, CETA, and CWETA, and regularly funded vocational education programs know that classroom activity coupled with work experience activity is the optimal way to train students.

(e) Develop a constant flow of information among all those providing vocational training in a given geographic area. Rural vocational educators recognize that there is not sufficient communication among providers of vocational education. Funded RAVE Councils with clearly defined limits are possible vehicles for accomplishing this.

(f) Coordinate basic educational programs and the development of vocational programs.

(g) Review locally mandated course requirements to determine their utility and necessity.

NUMBER EIGHT: UPGRADING PROFESSIONAL SKILLS

Discussion of the Issue:

There are two facets to this particular issue. First, there is the technological side of vocational training and the necessity for instructors to stay current in their particular field. A sabbatical once every seven years--often less frequently now with current budgetary constraints--is insufficient opportunity for continuing education.

The other facet involves instructors' responses to new student populations. Over the last decade the community colleges have seen their student bodies change dramatically. Vocational instructors hired ten and fifteen years ago to staff the new community college system spent a decade working with largely anglo, male, and non-handicapped students. They now find classrooms filled with very different student populations and are ill-prepared for their new clientele.

Strategy for Strengthening Rural Vocational Education:

Administrators of rural vocational programs recommend mandatory, regular, and periodic continuing education to maintain vocational education certification. This procedure is commonplace in other fields (accounting, medicine, real estate, etc.), and it is ironic that one

of our most vital professions makes no demands upon itself for periodic renewal. Continuing education should occur in two areas: knowledge of student demographics and characteristics, as well as the precise field of vocational training.

NUMBER NINE: VOCATIONAL EDUCATION GUIDANCE AND COUNSELING

Discussion of the Issue:

This issue is of sufficient general concern that the Chancellor's Office recently completed a study on the quality of guidance and counseling in the community college system. Furthermore, a number of VEA Subpart 3 projects for 1980-81 also address development of community college personnel in these areas.

In the early stages of their vocational training, students are often unsure of their goals or are operating on insufficient information. Ethnic minorities, handicapped students, and re-entry women are particularly susceptible to stereotyped notions regarding career possibilities. Students must be given accurate, complete, and supportive guidance and counseling which allows them to see what alternatives exist, how they can realize their goals, and what they can expect as their careers progress. Counseling should definitely not be the place where class enrollments are the primary consideration at the expense of the student.

Strategy to Strengthen Rural Vocational Education:

In the absence of other alternatives, rural vocational education administrators support additional training of current counseling staff. A preferred alternative, however, is to give vocational instructors release time equivalent to a vocational counselor's job. In either case, what is clearly needed are concerned and conscientious individuals with background in occupational education, with local job information at their fingertips, with diagnostic information about the students and the ability to elicit additional information from students themselves, who know about all programs offered by the college, and who are capable of matching students' desires and abilities with appropriate training programs (3, 6(b)).

NUMBER TEN: ANTI-RURAL BIAS

Discussion of the Issue:

There is a perception on the part of the rural administrators of vocational education programs that the Chancellor's Office is biased against rural areas and

against vocational education at the post-secondary level generally. There is precedent for this perception in the literature, as well (7, 12). The absence of a strong administrator for vocational education at the Vice-Chancellor level contributes to this perception. They feel that people at the State level are trying to de-emphasize vocational education in favor of more academic subjects and in contradiction to the federal trend for placing more emphasis and more dollars (through the Department of Labor) behind job training programs for special target groups.

Strategy to Strengthen Rural Vocational Education:

The effective strategy would involve appointing a vocational education administrator for the Chancellor's Office who would relate directly to administrators in the field and convey their concerns and ideas directly to the Chancellor and the Legislature.

NUMBER ELEVEN: GRANTSMANSHIP AND ADDITIONAL FUNDING

Discussion of the Issue:

Considerable resources are available to vocational education programs outside regular funding channels, but such resources are competitive and must be obtained through the process of grantsmanship. The rural institution is at a severe competitive disadvantage in this regard, whereas urban schools have permanent staff who do little else but address opportunities for special projects and special funding. Rural administrators of vocational education programs agree that the expertise does not exist within most rural community colleges to compete effectively for discretionary dollars. This conclusion is supported by the literature which terms this a chronic problem nationwide (6(a), 7, 8, 10).

Strategy for Strengthening Rural Vocational Education:

Two strategies would strengthen rural vocational education in this area. The first is for the Chancellor's Office to provide technical assistance to the field to identify sources of discretionary funds and help prepare fundable proposals. The second alternative is to contract with outside consultants to render such service. One possibility is for rural schools to approach discretionary funding as a consortium. If issues of governance could be resolved to each institution's satisfaction, the combined influence of several schools applying jointly would provide a competitive edge.

NUMBER TWELVE: SERVING NEW TYPES OF STUDENTS

Discussion of the Issue:

This issue revolves around the limited funding available for the special needs of target groups. Dollars are thinly allocated for special target groups, and developing suitable programs often means competing for funds used by existing programs, with major dislocations in the name of program development. Currently schools use CETA and CWETA funds to address the needs of special target groups. ESL programs, for example, are often funded exclusively through CETA. Without CETA, rural administrators of vocational programs would have great difficulty meeting the special costs involved in LES/NES training.

Strategy for Strengthening Rural Vocational Education:

Administrators of rural vocational programs advocate the consolidation of inadequately funded programs for special target groups where such consolidation would result in complete programs. The second consideration for such a strategy involves the quality of counseling and guidance provided students. Counselors who possess all the skills noted in number nine above and to whom target group students relate are the highest priority. Third, there should be a significant amount of staff development to increase instructors' understanding of and appreciation for target group students. Instructors who make special attempts to serve the needs of such students should be given incentives to continue doing so. As others see the success which is possible, they too will risk more responsive and effective approaches.

V. DIFFERENCES BETWEEN ANTICIPATED OUTCOMES AND ACTUAL OUTCOMES AND THE REASONS FOR THE DIFFERENCES

The difference between the project as originally written and the actual outcome was that portion which applied to curriculum experimentation. When the actual project got underway, it became clear that the areas of rural vocational education which needed strengthening were primarily administrative and financial in nature, thus eliminating three of the seven original objectives. The situation was discussed with State staff, and the decision was made to follow the original project design as far as possible, disregarding those objectives which could not be addressed. In all other respects the anticipated outcomes were consistent with actual outcomes. In fact, the actual outcomes went even further than originally anticipated, as the project generated data for discussions with the new Chancellor and substantiating information for changes.

The reasons for the differences noted above are clear. RFP's are written well in advance of project implementation, often more than two years before project implementation. Proposals are then constructed in response to older concepts, and proposals are expected to address all points in an RFP. With a more static project (e.g., development of curricular guides, etc.), the original project plan remains tenable. With a more dymanic design (i.e., action as the result of constructing an information base), circumstances can change to the extent that implementing the old design would be a foolish waste of resources.

In the case of "Strategies for Strengthening Rural Vocational Education," both Jarvis I and Jarvis II intervened and made finance and management the primary concerns of the project participants. In the course of accomplishing four of the project objectives, however, considerable amounts of information were generated which will be useful in further addressing these needs. And although the primary consideration was not instructional, instruction was an area of concern, included in the project's results, and will necessarily be affected by sufficient and equitable funding and effective management.

VI. HOW THE PROJECT WILL RESULT IN IMPROVED TEACHING TECHNIQUES OR CURRICULUM MATERIALS

The project is expected to result in improved instructional techniques and curriculum materials due to improved funding and management--both at the Chancellor's Office and at the local level. There were twelve major strategies which rural vocational educators identified for strengthening rural vocational education. The three most important included:

- Redesign the funding allocation
- Reinstate an administrator for vocational education at the Vice-Chancellor level
- Allow more flexibility in the way local schools are able to use VEA funds.

If these three strategies were implemented fully as rural vocational educators advocate, then attention can turn to instructional techniques and curriculum materials. The results of the project demonstrate clearly that management must be on a solid footing for the rest of the system to function efficiently and effectively. At present, management's attention is focused on financial and technical assistance problems, which causes the basic business of education to take a backseat to other issues.

With regard to impact, this project has already had an impact on communication between the Chancellor's Office and the field. At project mid-point, SJVCCCOE representatives met with the new Chancellor. Utilizing initial information generated from this project, they shared their concerns with him. He, in turn, indicated that he would give serious consideration to how best to address the concerns of vocational education and would call future meetings to resolve the issues. The representatives also volunteered as a group to act as a sounding board for modification of reporting forms and to assist in developing precise data-gathering instruments for the purpose of simplifying the reporting process. Three people representing vocational education were then called to Sacramento two months ago to discuss how the Chancellor's Office could better meet the needs of vocational education. While none of these things can be directly attributed to this project, the study made timely contributions to trends already underway and gave the field structured information for their presentations.

VII. DISSEMINATION OF PROJECT PRODUCTS

This project involved two types of dissemination, analogous to the two general types of evaluation. These might be labeled formative dissemination and summative dissemination.

First, this project was conducted in cooperation with administrators of vocational education at rural community colleges. In the process of defining the data base and developing the strategies, there was formative dissemination of information at every juncture in the project. In January, for example, it was the preliminary results of the second pilot needs assessment which were used for the meeting with the new California Community College Chancellor.

Summative dissemination will consist of presenting the final report to the California Community College Chancellor's Office. It will also include providing complimentary copiesof the report back to the field.

In Section III, "Activities Conducted During the Project," the follow-up activity planned for September was described. The project staff will meet with a select group of rural administrators of vocational education who participated in the study to review all findings and discuss implementations, implications, and strategies for future use.

VIII. FOLLOW-UP ACTIVITIES YET TO BE CONDUCTED

There are two types of follow-up activites which involve this project. One is the follow-up dissemination activity planned for September when project staff will meet with a group of participating rural vocational education administrators to review the results, discuss their implications, and develop strategies for future use of the information.

The other follow-up activity which may result from this project involves joint projects by consortia. Specifically, during the course of the project, SJVCCCOE participants entertained the notion that perhaps they could cost-effectively solve problems in their areas of funding, grantsmanship, evaluation, etc. more efficiently and effectively as a group. They will be looking to the new group of VEA Subpart 3 projects issued in the fall for completion in 1981 as a possible focus for their efforts.

IX. INTERNAL EVALUATION ACTIVITIES

It is possible to identify three levels of evaluation which affected this project. One was the internal evaluation which results from working with the project monitor assigned from the State level. In this case, the Community College Chancellor's Office provided the monitor who was kept informed of all project activities and progress.

Another more subtle kind of internal evaluation is the discipline imposed by working with another group. Early in September, immediately following initiation of the project, Project staff held its first meeting with target group administrators to discuss the project. This automatically put the project on task, and project staff became accountable to the people with whom they were working to deliver products as planned.

The third level of project evaluation came via third-party monitoring provided by the California Community College Chancellor's Office in cooperation with the State Department of Education. A contractor had been retained to monitor and evaluate all Subpart 3 projects. Regular contact was maintained with this individual, who required periodic reports and presentation of project results to an evaluation panel in June before termination of the project.

X. ADDITIONAL OBSERVATIONS FOR FUTURE PROJECTS

Project staff have three recommendations regarding future projects. One is that projects be initiated in a timely fashion so that the original project plan can be executed as designed if at all possible. This project began five months after its proposed starting date. Although previous events established the project's course, under other circumstances those five months might have made considerable difference in the execution of the project.

The project staff also recommends continued flexibility in the execution of projects. RFPs are usually written well in advance of project implementation, and circumstances change between the time the project is originally conceptualized and the time it is undertaken.

Finally, project staff recommend continuation of work which relates directly to the field and involves the field in its implementation. Too ofen reports such as these are developed, only to sit later gathering dust on bureaucratic shelves. In contrast, this project was developed with the help of the field and directly reflects their concerns and their solutions to issues which affect them. They own this project, and there should be more ownership of such projects. Our tax dollars would be better spent as a result.

ANNOTATED SELECTED REFERENCES

(1) Technical Analysis Paper #8--Research and Data Resources in Vocational Education: An Assessment. Lawrence Brown, Robert Barnes, Mary Currence, and Diane Henderson, Office of the Assistant Secretary for Planning and Evaluation (ASPE), HEW. February 14, 1980.

At the request of the Office of Education's Evaluation Planning group, members of the staff of the Assistant Secretary for Planning and Evaluation (ASPE) undertook a brief (3-month) review of past and current research and data collection activities in vocational education. They compiled an inventory of studies and data resources judged relevant and useful for policy development in connection with reauthorization; identified gaps and deficiencies in the information base; and made recommendations for responding with them. They found that access studies have dominated recent research. Education and work studies, several at least five years old, were the second most prevalent category. General descriptive studies of the vocational education enterprise are seriously lacking. Funding studies have generally failed because of the school finance data problems that beset vocational education. There are very few effectiveness studies. Those that have been conducted in the past have been controversial because of poor methodology and unwelcome findings, and thus, effectiveness studies are generally avoided. Recommendations are to emphasize descriptive, general studies and to encourage more studies of management, funding, and effectiveness to provide needed information on what works and what does not.

(2) A Survey of California Public Attitudes Toward the California Community Colleges. Field Research Cooperation. October 1979.

The survey results demonstrated a very high level of public awareness of the California Community College system. Among those who are enrolled or planning to attend a community college within the next 12 months, the chief reason for attending is for personal improvement or enrichment. The second ranking reason is to prepare for work. More than half of the group interviewed, or 23.1 percent of all California adults, believe that they need vocational training which they cannot get on the job and say that they intend to get such training soon. This represents the market or need for vocational training among California adults. All but a very small portion think they can get the type of instruction they need in a classroom setting, and approximately two-thirds of the group think the community

colleges are good places to get the training they feel they need. The top ten fields of interest for vocational education in the classroom are, in rank order: business, engineering, health occupations, education, fine and applied arts, computer science, public affairs, public service, agriculture, law, and architecture.

(3) Opportunities to Improve Responsiveness to Vocational Education. Prepared for the Joint Legislative Audit Committee by the Office of the Auditor General. Report 723.2, April 1978.

This report reviewed the responsiveness of public school vocational education to labor market conditions. The Auditor General's Office found that:

- Vocational education enrollments persist in traditional program areas despite projections showing that major programs within these areas have limited relevancy to the labor market.
- Postsecondary programs are in some cases more aligned to current and anticipated employment opportunities than those offered by the secondary system.
- Apparent imbalances exist between the projected demand for various occupations and the number of vocationally trained students.
- Occupational information is neither collected nor disseminated in a form that satisfies the informational needs of vocational education administrators and planners.
- As a result of the above conditions, students may have difficulty obtaining employment in fields for which they were trained, and there is no assurance that the vocational education system is addressing manpower needs.

(4) Distribution of Federal Vocational Education Funds in California. Prepared for the Joint Legislative Audit Committee by the Office of the Auditor General. Report P-860.1, March 1979.

Review of Department of Education procedures for distributing federal Vocational Education Act (VEA) funds in California indicates that: large districts with high numbers of students in grades 9-12 received substantially more VEA funds per pupil than did small districts in 1978-79; the Legislature has little involvement in the distribution of federal vocational education funds throughout the state.

(5) Letter Report 860.2. Prepared for the Joint Legislative Audit Committee by the Office of the Auditor General. June 1979.

This Letter Report found that neither a comprehensive study of the allocation formula for federal vocational education funds used by the State Department of Education and the Chancellor's Office of the California Community Colleges, nor the State Department of Education's Administration of 1978-79 federal program improvement and supportive services funds and the use of the studies and projects they funded, could be accomplished. Vocational education funding in this State is non-categorical. Because the California School Accounting Manual did not require program accounting for non-categorical programs, reliable data on income and expenditures at the local level are generally unavailable.* Consequently, the sources and uses of vocational education funds for 1977-78 cannot be determined. (*NOTE: This problem may have been partially alleviated in the 1978-79 school year by the 1977 Amendments to the School Accounting Manual which require program accounting.)

(6) Summary of Sixteen Papers Presented at the Rural Education Seminar in Maryland, Sponsored by the Department of Health, Education, and Welfare, Edited by Marvin R. Stewart, Ed.D., Superintendent, Hughson Union High School District. May, 1979.

(a) Funding Mechanisms and Their Effects on Rural Areas. Gail Bass and Paul Berman. Rand Research, Santa Monica, California.

A study of fiscal year 1977 federal funding patterns in six sample states, including California, found that anti-rural bias is in fact alive and well, that rural students do not get their fair share of the federal education dollar, and that federal programs are sometimes poorly tailored to rural conditions.

(b) Education Training Programs and Rural Development. Frank A. Fratoe, Economic Development Division, Economics, Statistics and Cooperative Service, U.C. Department of Agriculture.

Students of small rural schools do not have the full access to career vocational training available to their urban counterparts. Rural schools have

a tendency to focus disproportionately on traditional career subjects. A wide range of career vocational programs may be advisable to train people for new positions in the expanding rural labor market, to foster the work skills desired by business firms which wish to relocate, and to create human development initiatives for local economic growth. A general lack of guidance counseling prevents many rural youth from obtaining a full knowledge of the local and regional employment status. A network of vocational education efforts in employment programs is seldom present in rural communities. The absence of this network means a greater training burden on schools ill-equipped to handle them. Another problem is that rural agencies lack the proposal-writing expertise possessed by urban counterparts, whose larger professional staffs are better able to prepare successfully funded, comprehensive plans. The employment needs of cities may have received higher federal priority because they are simply more conspicuous.

(c) Federal Education Programs and Rural Development Needs. Gail A. Parks and Gordon Hoke. The National Rural Center, Washington, D.C.

Federal programs depend on numbers of disadvantaged students, rather than on their proportions in the population. The rural school may be ineligible or seriously crippled in its ability to secure special programs. The authors recommend that the federal agencies concerned with education programs insure that each program made available for the rural sector contain provisions to accommodate most, if not all, of the provisions listed below: local involvement; a bottoms-up process; development of networks and linkages; emphasis on planning and process, as well as sharing and cooperation; coordination of services with a comprehensive approach.

(d) Rural Voc's for Rural Folks: Vocational Education in the Country. Stuart A. Rosenfeld, Senior Associate, NIE.

There is a need to review the funding formula for vocational education to include variable costs such as supplies and insurance, semi-fixed costs such as construction and transportation and fixed costs, such as plant and administration. Therefore, funding levels which seem fair in terms of per-pupil enrollment may not give the rural vocational education student opportunities equivalent to students

in more populated areas. Further, there is a need to find innovative ways to provide services to dispersed populations. Specifically, the goals in the Vocational Education Act specify employment in the occupation for which a student is being trained. This disregards many characteristics of rural economies. Different policies could allow vocational education systems in rural areas more flexibility. There is a need for a wider range of skills in rural areas, contrary to the trend in industry toward more specialization.

(e) Rural Education and Rural Development. Luther Tweeten, Regents Professor, Department of Agriculture, Oklahoma State University, Stillwater, Oklahoma. 1979.

There seems to be a disproportionate amount of the poor concentrated in the rural areas. Further, rural students are less likely to complete four years of high school; to plan a college education; to enter college; to receive vocational training; or to enroll in an adult educational program.

(7) National Seminar on Rural Education Recommendations, May 29-31, 1979. University of Maryland. Sponsored by the U.S. Department of HEW and U.S. Department of Agriculture, Science, and Education Administration.

The following points are particularly relevant to this study:

- Anti-rural attitudes and practices are presently found in many policies, legislation, and recommendations. Because legislation and regulations rarely contain explicit provisions for rural areas, many affect rural areas in unforeseen ways.
- The impact of financing formulae and other funding mechanisms should be examined to provide maximum local flexibility in dealing with the needs of special rural populations.
- Additional support in the areas of transportation, facilities, and delivery systems should be considered to enable rural districts to provide equitable services to special populations.
- Even an equal share of funds on a per pupil basis will often be insufficient to overcome the diseconomies of scale involved in providing special rural populations with services comparable to those available in urban and suburban areas. Some additional incentives and compensating factors are needed. A scarsity factor may be the appropriate equalizing mechanism for funding formulas.

- In competitive grants in particular, rural areas are awarded less than a fair share of the federal grants dollars. Small districts have few personnel available who have the time or expertise to develop competitively strong proposals, administer federal programs, and respond to data requests and reporting these limitations. Technical assistance in competing and administering are needed.
- There is a relative lack of coordination of federal education training programs. Each program type seems to have been conceived and implemented with little regard for its potential complementary role with other programs.
- While little empirical evidence exists, there seems no doubt that rural youth and adults are basically without sufficient quality career guidance and counseling.
- Rural women are at a disadvantage within an already limited rural job market. They need counseling programs, skills training, assistance in gaining access to nontraditional occupations, and support services (e.g., day care).

(8) A Working Paper on Department of Labor Rural Strategy and Programs. Prepared by the U.S. Department of Labor. November 1978.

This paper was used at the National Rural Employment and Training Conference. The structure of employment in rural areas has undergone a major transformation in the post-World War II period. The basic trend has been the wholesale displacement of workers from agriculture over an extended period of time, primarily because of technological changes that drastically reduced the demand for farm labor. Although there are regional variations, the vast majority of the 30 million workers who comprise today's rural labor force have little or no connection with farming. The largest single source of rural employment and earnings in 1978 was manufacturing, followed by wholesale and retail trading and government services. Less than ten percent of all rural workers are employed in agriculture. Another significant and more recent trend is the increasing labor force participation of rural workers, especially rural women. Between 1970 and 1977, the rural labor force increased by 27 percent, but the participation rate for women in the rural labor force increased from 36 to 45 percent.

For nearly a decade, the nation's rural population has increased at a rate almost twice that for urban areas. This recent growth is often referred to as the rural renaissance. At the same time, most measures of material well-being show that rural areas continue to lag behind urban areas. Many rural areas continue to stagnate or decline in the midst of this so-called rural renaissance. Although rural areas contain only 26 percent of the total U.S. population, 39 percent of the nation's poor are in rural areas. For racial minority groups, poverty, unemployment, and underemployment have a permanent structural character which requires special employment and training programs.

Historically rural areas have received less than a fair share of employment and training resources because of allocation formulae that favored urban areas. A basic cause of the relatively low allocation of CETA resources, for example, has been the reliance upon the official unemployment rate as a measure of need. In rural areas, however, subtle biases operate. Underemployment is most serious and the unemployed are more likely to be undercounted.

(9) A Description of the Rural Programs of the Department of Labor. Prepared by the United States Department of Labor, 1978.

DOL involvement in non-metropolitan areas revolves largely around employment and training under CETA. CETA is not exclusively rural, yet none of the other DOL activities put more money into non-metropolitan areas. The research and development arm of the Department does not conduct a formal rural R and D program.

(10) Small/Rural Two Year Colleges--An Analysis of Their Problems and Characteristics. Robert A. Ross, Coordinator of Institutional of Research, Piedmont Virginia, Community College 1979.

The literature pertaining to small/rural two year institutions of higher education suggests that these colleges face unique and important problems. This literature does not, however, provide a consistent and objective definition of the small rural category. A listing of problems of major importance facing two year institutions as of the fall 1978 emerged as a result of this study. It is based on the perceptions of those surveyed.

(a) After the start of the fiscal year,, an across-the-board budget cut of three to five percent would create greater than normal difficulties for our institutions.

(b) Completing required state and federal reports constitutes an undue burden for this institution.

(c) We have a limited institutional research capability.

(d) Our college lacks the necessary qualified staff to locate resources, write grants and provide aggressive follow-up to obtain federal and/or other non-routine funding.

(e) In order to have comprehensive administrative and student services, our staff members must serve in several administrative capacities.

(f) It is difficult for us to provide comprehensive staff development for our faculty and staff.

(g) We have difficulty in gaining an appropriate voice concerning legislative decisions that affect our institution.

(h) It is difficult for this college to do an effective job of long-range planning.

(i) Delivery of educational services to the disadvantaged groups in our service area is a problem.

(j) Our available resources are insufficient to deal with the problems of low-income, disadvantaged students.

(11) Rural Development Progress, Fourth Annual Report of the Secretary of Agriculture to the Congress. Prepared by Jonathan P. Sher, Consultant to HEW's National Institute of Education and Office of Rural Development 1979.

The Census Bureau definition of rural involves three status indicators: open, countryside, and places of less than 2500 population. Generating revenue is a primary difficulty for rural schools, and they often have additional financial burdens, such as transportation and high pupil costs for specialized educational programs. Federal assistance has remained disproportionately low. HEW testimony before the Senate Subcommittee on Rural Development revealed that, even though nearly one-third of the Nation's school children and one-half of the Nation's poor families live in non-metropolitan areas, only 11 percent of

library and materials funds, 13 percent of basic vocational aide, 14 percent of guaranteed student loan monies, 8 percent of migrant education aid, 13 percent of dropout prevention funds, and 20 percent of bilingual education monies went to non-metropolitan areas.

(12) "Rural, Small School Leaders Tells 'Feds' What To Do." Small School District Administrator, Vol. 1, No. 3. September 1979.

This article describes the Rural Education Seminar at the University of Maryland in May 1979 which convened with federal officials from HEW and the U.S. Department of Agriculture for three days to draw up recommendations to guide a renewed interest at the federal level in rural and small schools. Twenty-eight federal initiatives to help rural and small schools, were grouped into six categories by sponsors of the seminar:

1. Equity and equality for rural education--the federal level should work to eliminate anti-rural bias in its policies, make sure its formulae provide maximum services and flexibility for rural areas in meeting the needs of special populations and encourage local initiatives.
2. Linking rural development and rural education--the federal level should help rural areas assess the needs of their schools, implement activities to meet those needs and encourage collaboration among rural groups.
3. Delivery of services to rural education--the federal level should provide preservice and inservice training for rural educational personnel, provide incentives to attract personnel to rural schools, expand the use of technology in rural education and fully use educational service agencies.
4. Data collection and research--the federal level should provide for data collection and increased support of research on rural education.
5. Vocational and career training in rural areas--the federal level should provide format coordination of federal programs in occupational training for rural populations, help tailor guidance and counseling to rural needs, support research in this area, include programs that encourage local entrepreneurship and establish research and action programs for rural women.
6. Energy and rural education--the federal level should rethink consolidation policies because of the energy shortage and develop conservation measures relevant to rural schools.

(13) The Vocational Education Act of 1976, Title II of Public Law 94-482, Education Amendments of 1976, and Public Law 95-40. Revised August 1, 1977.

NORTHEASTERN CALIFORNIA HIGHER EDUCATION COUNCIL
and
SAN JOAQUIN VALLEY COMMUNITY COLLEGE COUNCIL
FOR OCCUPATIONAL EDUCATION

		ΣX	$\bar{X}$	σ
1.	Voc Ed finance or governance (i.e., diseconomy of scale for rural programs; tax-limitation legislation; structure of funding formula, etc.).	61	4.69	2.184
2.	Excess program costs making new or high-quality offerings difficult or impossible.	56	4.31	2.600
3.	Staff over-extension; (i.e., Teaching/Administrative duties; paperwork; advisory committees, State and Federal regulations/compliances.	56	4.38	3.009
4.	Chancellor's Office and State Department of Education placing an emphasis on categorical funding for handicapped, disadvantaged, sex equity, etc.	55	4.23	4.038
5.	Regulations and paperwork required by State and Federal Government.	55	4.23	4.506
6.	Ability to meet the needs of specialized employment needs of local industry due to cost of programs and small numbers of needed employees (i.e., small class too expensive).	54	4.15	2.774
7.	Leverage with the California State Legislature.	53	4.08	3.304
8.	Increasing educational alternatives; (i.e., Government sponsored programs and Titles: II, VII, CETA, CWETA: proprietary institutions; on-the-job training; business and industry providing educational delivery).	53	4.08	3.305
9.	Categorical funding requires increased staff and clerical time for applications, monitoring, evaluations and follow-up that small colleges cannot afford to provide.	53	4.08	4.350
10.	Ability to provide new "specialized occupations" due to "general vocational" needs of rural non-industrialized communities.	52	4.0	4.000
11.	Adequate program planning information, including documented local labor market analyses and identification of new and emerging manpower needs.	47	3.62	3.328
12.	Instructors' skills to teach new curricula or to work effectively with new types of students (i.e., re-entry, handicapped, disadvantaged, etc.)	46	3.54	3.639

		ΣX	$\bar{X}$	σ
13.	Rising transportation costs or excessive costs in relation to available budget.	46	3.54	4.775
14.	Motivation of existing instructional staff given present system of tenure.	46	3.54	5.100
15.	Absence of a network of supportive efforts for Voc Ed (i.e., coordination among all agencies in a given rural area to work toward a common goal: employment).	45	3.46	2.286
16.	Guidance and counseling services to enhance students' ability to make and/or develop career choices.	45	3.46	2.690
17.	Availability of appropriate work experiences in the local labor market.	45	3.46	3.351
18.	Anti-rural bias on the part of the State Department of Education, the Chancellor's Office, etc.	45	3.46	4.610
19.	Lack of proposal writing expertise or lack of time of available personnel to seek additional funding.	45	3.46	5.023
20.	Voc Ed for handicapped students.	41	3.15	2.773
21.	Locally relevant and up-to-date curricula.	40	3.08	2.989
22.	Basic education instructional programs and coordination of Voc Ed with such programs.	40	3.08	3.31
23.	Coordination of programs with business and labor and local economic development activities.	40	3.08	3.863
24.	Course requirements mandated by law.	40	3.08	4.113
25.	Coordination of programs funded directly by D.O.L. or H.E.W.	40	3.08	4.788
26.	Providing and administering specially funded programs.	39	3.00	4.00
27.	Programs for people re-entering the labor market.	33	2.54	2.690
28.	Mechanisms to reduce sex-stereotyping.	32	2.46	4.151
29.	Programs to serve limited English-speaking students.	32	2.46	4.385

SAN JOAQUIN VALLEY COMMUNITY COLLEGE COUNCIL
FOR OCCUPATIONAL EDUCATION

		ΣX	$\bar{x}$	σ
1.	Voc Ed finance or governance, i.e., diseconomy of scale for rural programs; tax-limitation legislation; structure of funding formula, etc.	43	4.73	.416
2.	Ability to meet the needs of specialized employment needs of local industry due to cost of programs and small numbers of needed employees (i.e., small class too expensive).	39	4.33	.667
3.	Staff over-extension: (i.e., Teaching/Administrative duties; paperwork; advisory committees; State and Federal regulations/compliances.	39	4.33	.816
4.	Excess program costs making new or high-quality offerings difficult or impossible.	39	4.33	.817
5.	Chancellors' Office and State Department of Education placing an emphasis on categorical funding for handicapped, disadvantaged, sex equity, etc.	39	4.33	1.055
6.	Increasing educational alternatives; (i.e., Government sponsored programs and Titles: II, VII, CETA, CWETA; proprietary institutions; on-the-job training; business and industry providing educational delivery).	38	4.22	.785
7.	Regulations and paperwork required by State and Federal Government.	37	4.11	1.448
8.	Leverage with the California State Legislature.	36	4.00	.942
9.	Ability to provide new "specialized occupations" due to "general vocational" needs of rural non-industralized communities.	35	3.89	1.286
10.	Categorical funding requires increased staff and clerical time for applications, monitoring, evaluations and follow-up that small colleges cannot afford to provide.	35	3.89	1.369
11.	Absence of a network of supportive efforts for Voc Ed (i.e., coordination among all agencies in a given rural area to work toward a common goal: employment).	33	3.67	.472

		ΣX	$\bar{X}$	σ
12.	Instructors' skills to teach new curricula or to work effectively with new types of students (i.e., re-entry, handicapped, disadvantaged, etc.)	32	3.56	.956
13.	Anti-rural bias on the part of the State Department of Education, the Chancellor's Office, etc.	32	3.56	1.426
14.	Adequate program planning information, including documentted local labor market analyses and identification of new and emerging manpower needs.	31	3.44	.956
15.	Guidance and counseling services to enhance students' ability to make and/or develop career choices.	30	3.35	.667
16.	Motivation of existing instructional staff given present system of tenure.	30	3.33	1.247
17.	Voc Ed for handicapped students.	29	3.22	.785
18.	Locally relevant and up-to-date curricula.	29	3.22	.916
19.	Basic education instructional programs and coordination of Voc Ed with such programs.	29	3.22	.947
20.	Course requirements mandated by law.	29	3.22	1.314
21.	Rising transportation costs or excessive costs in relation to available budget.	29	3.22	1.474
22.	Availability of appropriate work experiences in the local labor market.	28	3.11	.737
23.	Lack of proposal writing expertise or lack of time of available personnel to seek additional funding.	28	3.11	1.522
24.	Coordination of programs funded directly by D.O.L. or H.E.W.	28	3.11	1.523
25.	Providing and administering specially funded programs.	25	2.78	1.227
26.	Coordination of programs with business and labor and local economic development activities.	24	2.67	.817
27.	Programs for people re-entering the labor market.	22	2.44	.831
28.	Programs to serve limited English-speaking students.	20	2.22	1.191
29.	Mechanisms to reduce sex-stereotyping.	18	2.00	1.055

NORTHEASTERN CALIFORNIA HIGHER EDUCATION COUNCIL

		ΣX	$\bar{x}$	σ
1.	Voc Ed finance or governance, i.e., diseconomy of scale for rural programs; tax-limitation legislation; structure of funding formula, etc.	18	4.5	.866
2.	Categorical funding requires increased staff and clerical time for applications, monitoring, evaluations and follow-up that small colleges cannot afford to provide.	18	4.5	1.000
3.	Regulations and paperwork required by State and Federal Government.	18	4.5	1.000
4.	Excess program costs making new or high-quality offerings difficult or impossible.	17	4.25	.866
5.	Lack of proposal writing expertise or lack of time of available personnel to seek additional funding.	17	4.25	.866
6.	Rising transportation costs or excessive costs in relation to available budget.	17	4.25	.866
7.	Ability to provide new "specialized occupations" due to "general vocational" needs of rural non-industrialized communities.	17	4.25	.866
8.	Availability of appropriate work experiences in the local labor market.	17	4.25	1.658
9.	Leverage with the California State Legislature.	17	4.25	1.658
10.	Staff over-extension; (i.e., Teaching/Administrative duties; paperwork; advisory committees; State and Federal regulations/compliances.).	17	4.25	1.658
11.	Motivation of existing instructional staff given present system of tenure.	16	4.0	1.414
12.	Adequate program planning information, including documented local labor market analyses and identification of new and emerging manpower needs.	16	4.0	1.414
13.	Coordination of programs with business and labor and local economic development activities.	16	4.0	2.000
14.	Chancellor's Office and State Department of Education placing an emphasis on categorical funding for handicapped, disadvantaged, sex equity, etc.	16	4.0	2.449

		ΣX	$\bar{x}$	σ
15.	Guidance and counseling services to enhance students' ability to make and/or develop career choices.	15	3.75	1.658
16.	Ability to meet the needs of specialized employment needs of local industry due to cost of programs and small numbers of needed employees (i.e., small class to expensive).	15	3.75	1.658
17.	Increasing educational alternatives; (i.e., Government sponsored programs and Titles: II, VII, CETA, CWETA; proprietary institutions; on-the-job training; business and industry providing educational delivery).	15	3.75	2.180
18.	Providing and administering specially funded programs.	14	3.5	1.000
19.	Mechanisms to reduce sex-stereotyping.	14	3.5	1.000
20.	Instructors' skills to teach new curricula or to work effectively with new types of students (i.e., re-entry, handicapped, disadvantaged, etc.)	14	3.5	2.237
21.	Anti-rural bias on the part of the State Department of Education, the Chancellor's Office, etc.	13	3.25	2.236
22.	Programs to serve limited English-speaking students.	12	3.0	0
23.	Absence of a network of supportive efforts for Voc Ed (i.e., coordination among all agencies in a given rural area to work toward a common goal: employment).	12	3.0	1.414
24.	Voc Ed for handicapped students.	12	3.0	1.414
25.	Coordination of programs funded directly by D.O.L. or H.E.W.	12	3.0	1.414
26.	Basic education instructional programs and coordination of Voc Ed with such programs.	11	2.75	.866
27.	Programs for people re-entering the labor market.	11	2.75	.866
28.	Locally relevant and up-to-date curricula.	11	2.75	.866
29.	Course requirements mandated by law.	11	2.75	.866